



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,936	01/18/2001	Roland Eberlein	4965-000114	9936
21874	7590	09/14/2005	EXAMINER	
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			LEWIS, KIM M	
			ART UNIT	PAPER NUMBER
			3743	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/764,936

Applicant(s)

EBERLEIN ET AL.

Examiner

Kim M. Lewis

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detailed Action.

DETAILED ACTION

This application has been transferred to Primary Examiner Kim M. Lewis, AU 3743.

Response to Amendment

1. The amendment filed on 6/27/05 has been received and made of record. As requested claim 1 has been amended, and claim 15 has been added and claims 4-6 have been cancelled.
2. Claims 1-3 and 7-14 are pending of which claim 14 has been withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 7-12 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,954,722 ("Bono").

Regarding claim 1, Bono discloses a fastening assembly having a fixing element (such as 10, 110) to be fastened to a substructure where the fixing element has at least

Art Unit: 3743

one bore (such as 14), as seen in figure 6. There is at least one screw (such as 18) which can be passed through the at least one bore of the fixing element (10, 110), and which can be screwed into the substructure, the screw having a shaft and a head, as seen in figures 5-6. There is at least one bushing (16) arranged in the at least bore (14), through which the screw (18) can be passed for screwing the screw into the substructure. Further, the bushing is able to swivel in several special directions when seated in the bore and the bushing has a seat for at least partially receiving at least a partial surface of the head of the screw, as recited in columns 4-5 and seen in figures 5-8. An inner surface of the bore and an outer surface of the bushing are formed to be about spherically curved (column 4, lines 35-45), such that a region of largest diameter of the inner surface and the outer surface is situated between an upper edge and a lower edge of the bore, and the bushing is loss-proof pressed in the bore, as recited in columns 4-6 and seen in figure 6. As to the recitation of "loss-proof", it can be considered that the bushing is "loss proof" since the current specification does not define "loss-proof". Furthermore, as can be seen in Fig. 6, the head of the screw and the seat of the bushing form a "form-locking connection" in that the screw head is locked via its threads into the bushing". Applicant should note that a formal definition of the phrase "form-locking connection" is not provided in the specification.

Regarding claim 2, Bono discloses that as applied to claim 1, as well as, a symmetry axis of the bushing that can be swiveled preferably over an entire azimuth angle of 360 degrees in an angular range of 0 degree to at least 45 degrees, with

Art Unit: 3743

respect to a symmetry axis of the bore, as discussed in columns 4-6 and seen in figure 6.

Regarding claim 3, Bono discloses that as applied to claim 1, as well as a bushing that is mounted directly in the bore, as seen in figure 6.

Regarding claim 7, Bono discloses that as applied to claim 1, as well as, a head of the screw and the seat of the bushing are formed conically to be complimentary to one another, recited in columns 4-6.

Regarding claim 8, Bono discloses that as applied to claim 1, as well as, an upper edge of the seat of the bushing that is rounded, as recited in columns 4-6 and seen in figure 6, for example. The claim does not limit the direction in which the bushing is rounded.

Regarding claim 9, Bono discloses that as applied to claim 1, as well as, a periphery of the head of the screw is configured as a support surface, which in the tightened condition of the screw rests against a support surface of the bushing formed to be approximately complimentary to the support surface of the head, as recited in columns 4-6 and seen in figure 6.

Regarding claim 10, Bono discloses that as applied to claim 1, as well as, a bushing (16) that has approximately the same height as the bore, and wherein the head of the screw has approximately the same height as the seat of the bushing, as seen in figure 6.

Regarding claim 11, Bono discloses that as applied to claim 1, as well as, a bushing (16) that is integrally formed of metal or of synthetic material, or comprises a

Art Unit: 3743

metal body with the seat of the bushing then being at least partially coated with synthetic material, as recited in column 4, lines 30-35.

Regarding claim 12, Bono discloses that as applied to claim 1. Further, claim 12 is intended use. Nonetheless, Bono discloses securing a bone fracture in a human body, wherein the fixing element is a rigid plate or a rigid brace and the at least one screw is a bone screw, as discussed throughout the Bono reference.

As regards claim 15, Bono anticipates applicant's invention as presently claimed. More specifically, as can be seen in Fig. 6 a fastening assembly (constituted by the locking plate assembly). The locking plate assembly comprises: a fixing element (constituted by member 110) to be fastened to a substructure, said fixing element having at least one bore (constituted by member 14); at least one screw (constituted by member 18) which can be passed through said at least one bore of said fixing element, and which can be screwed into said substructure, said screw having a shaft and a head; and at least one bushing (16) arranged in said at least one bore, through which said screw can be passed for screwing said screw into said substructure, said bushing being able to swivel in several spatial directions (note the abstract) when seated in said bore, said bushing further comprising a seat (constituted by threads) for at least partially receiving at least a partial surface of said head of said screw, wherein the screw head is connected to the seat in a press-fit manner when the screw is completely inserted (this is accomplished by screwing the head in the bushing). Also, seen from Fig. 6 is that an inner surface of said bore and an outer surface of said bushing are formed to be about spherically curved, such that a region of largest diameter of said inner surface and said

Art Unit: 3743

outer surface is situated between an upper edge and a lower edge of said bore, wherein said bushing is "loss-proof pressed" (note the discussion above) in said bore. Applicant should note that a formal definition of "press-fit" is neither presented nor in the specification or in the claims.

Response to Arguments

5. Applicant's arguments filed 6/27/05 have been fully considered but they are not persuasive. Applicant's primary arguments are that Bono does not disclose a "form-locking connection", but discloses a frictional connection, and that the present invention has a screw head that is threadless but form-fitting with the bushing and remains swivable until the screw is completely screwed in.

In response the examiner contends that the "form-fitting locking connection" is anticipated by the threaded screw head and threaded bushing connection since applicant's recited claim language does not preclude threaded screw heads and threaded bushings, and since the threads of the bushing and screw head fit into one another, thereby being form-fitting. Additionally, applicant's claim language does not require the prior art to remain swivable until the screw is completely screwed in. Thus, applicant argues limitations not present in the claim.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 3743

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

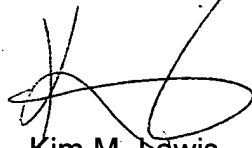
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim M. Lewis whose telephone number is (571) 272-4796. The examiner can normally be reached on Mondays to Thursdays from 5:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett, can be reached on (571) 272-4791. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kim M. Lewis
Primary Examiner
Art Unit 3743

kml
September 12, 2005